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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/924,022 | 08/07/2001 | Bruce E. McNair | ATT-020PUS | 3026 |

26652 7590 02/22/2007
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| EXAMINER |
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BEAMER, TEMICA M

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| ART UNIT | PAPER NUMBER |
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2617

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 02/22/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/924,022

Applicant(s)

MCNAIR, BRUCE E.

Examiner

Temica M. Beamer

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-27 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/23/2006 have been fully considered but they are not persuasive. Applicant argues that Kangas taken solely or in combination, fails to disclose the claims as amended. Specifically, the applicant argues that Kangas fails to disclose wherein simulcast signals having substantially identical information. The examiner, however, disagrees.

The claim language requires that the information signals sent from the base stations have to be substantially identical. Kangas discloses that the observed time difference (OTD) technique used to determine mobile location uses base station signals that are transmitted simultaneously. The signals from each base station are substantially identical in the sense that each signal includes second search code (SSC), wherein each SSC contains 16 codes that are transmitted simultaneously with a first search code (FSC) (col. 4, lines 13-28).

Based on the above remarks and evidence shown, the examiner contends that Kangas taken alone or in combination reads on the invention as presently claimed.

In regards to the applicant's challenge of the official notice, references describing the various techniques of locating a mobile are provided below.

Lindqvist, U.S. Patent No. 6,166,691, discloses locating a mobile device using GPS technology (col. 1, lines 27-40).

Kilfeather et al, U.S. Patent No. 6,243,648, discloses locating a mobile device using Doppler and GPS technology (col. 5, lines 18-30).

Siwiak, U.S. Patent No. 5,537,398, disclose a simulcast system using an OFDM technique (abstract and col. 2, lines 12-23).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 7, 10-13-16, 18, 21, 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Kangas et al (Kangas), U.S. Patent No. 6,356,763.

Regarding claims 1-3, 7, 10-13-16, 18, 21, 23 and 24, Kangas discloses a method for locating a mobile station comprising receiving a plurality of simulcast signals from respective base stations; determining relative time of arrival information for the received plurality of simulcast signals and determining the position of the mobile station (col. 1, lines 42-57, col. 6, lines 35-61; figure 2).

Kangas discloses the transmission and reception of base station identification information that is used in determining the time of arrival of simulcast signals from a plurality of base stations (col. 2, lines 43-51). Kangas further discloses transmitting

mobile location information from the mobile station (via output device 66) to a server (MLC) via a base station (col. 10, lines 18-28; figure 6). See also col. 7, lines 38-50, col. 8, line 56-col. 9, line 16 and col. 9, line 44-col. 27).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-6, 8, 9, 19, 20, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kangas in view of well-known prior art.

Regarding claims 4-6, 19, 20, 22 and 25, Kangas discloses the method of locating a mobile station as described above. Kangas further discloses using a frequency response to obtain time of arrival and wherein location information is transmitted in the system (col. 9, lines 41-64, col. 10, lines 18-27). Kangas, however, fails to disclose wherein the simulcast uses OFDM modulation.

The examiner contends, however, that OFDM modulation is very well-known and widely used in cellular systems. Therefore at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Kangas with the teachings of well-known prior art for the purpose of reducing the impact of interference.

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Regarding claims 8 and 9, Kangas discloses the method of locating a mobile station as described above. Kangas, however, fails to disclose the various techniques of locating a mobile station such as using GPS and Doppler Shift.

The examiner contends, however, that such techniques are very well-known in the art and the examiner takes official notice as such. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Kangas with the teachings of well-known prior art to perhaps improve the accuracy of locating a mobile station in an emergency situation.

6. Claims 17, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kangas in view of Oren et al (Oren), U.S. Patent No. 6,725,045.

Regarding claims 17, 26 and 27, Kangas discloses the method of locating a mobile as described above. Kangas, however, fails to disclose broadcasting location-specific advertisements/location specific information to mobile stations from base stations.

In a similar field endeavor, Oren discloses broadcasting location-specific advertisements/information to mobile stations via gateways (base stations) (col. 4, lines 8-13).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Kangas with the teachings of Oren in order to notify mobile units of advertisements the mobile user may be interested in.

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Beamer whose telephone number is (571) 272-7797. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 7:30am-4:00pm.

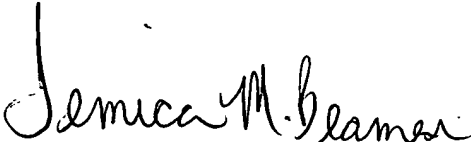
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Temica M. Beamer
Primary Examiner
Art Unit 2617

tmb


TEMICA BEAMER
PRIMARY EXAMINER